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| APPLICATION NO.        | FILING DATE                   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO |  |
|------------------------|-------------------------------|----------------------|------------------------|-----------------|--|
| 10/757,390             | 01/15/2004                    | Kenichi Ono          | 247683US2              | 4962            |  |
| 22850                  | 7590 10/06/2006               |                      | EXAMINER               |                 |  |
| 0                      | MCCLELLAND                    | VU, JIMMY T          |                        |                 |  |
| OBLON, SI<br>1940 DUKE | PIVAK, MCCLELLAND,<br>ESTREET | ART UNIT             | PAPER NUMBER           |                 |  |
| ALEXAND                | RIA, VA 22314                 | 2821                 |                        |                 |  |
|                        |                               |                      | DATE MAILED: 10/06/200 | 6               |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   |   | Application No.   | Applicant(s)  |              |  |  |  |
|---|---|---|---|---|--------------|--|--|--|
| Office Action Summary                                   |   |   | 10/757;390  | ONO, KENICHI  |              |  |  |  |
|   |   |   | Examiner  | Art Unit  |              |  |  |  |
|   |   |   | Jimmy T. Vu   | 2821  |              |  |  |  |
| Period fo   | The MAILING DATE of this communic<br>or Reply   | ation appe  | ears on the cover sheet   | with the correspondence a   | ddress       |  |  |  |
| WHIC<br>- Exter<br>after<br>- If NO<br>- Failu<br>Any r | ORTENED STATUTORY PERIOD FO<br>CHEVER IS LONGER, FROM THE MA<br>Isions of time may be available under the provisions of<br>SIX (6) MONTHS from the mailing date of this commu<br>period for reply is specified above, the maximum statuse<br>to reply within the set or extended period for reply we<br>pely received by the Office later than three months after<br>the patent term adjustment. See 37 CFR 1.704(b). | AILING DA<br>f 37 CFR 1.130<br>nication.<br>utory period wi<br>ill, by statute, o | TE OF THIS COMMUI<br>5(a). In no event, however, may<br>Il apply and will expire SIX (6) M<br>cause the application to become | NICATION.  y a reply be timely filed  IONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133). | ,            |  |  |  |
| Status  |   |   |   |   |              |  |  |  |
| 1)🖂   | Responsive to communication(s) filed  | on <i>10 Ju</i>   | lv 2006   |   |              |  |  |  |
|   | •   | •   | action is non-final.  |   |              |  |  |  |
| ·   | , <del></del>   |   |   |   |              |  |  |  |
| ,   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |   |   |   |              |  |  |  |
| Dispositi   | on of Claims  |   | •   |   |              |  |  |  |
| 4)⊠   | Claim(s) 1-58 is/are pending in the ap  | plication.  |   |   |              |  |  |  |
|   | 4a) Of the above claim(s) <u>38-58</u> is/are   | -   | n from consideration.   |   | • •          |  |  |  |
|   | _   |   |   |   |              |  |  |  |
| ·   | Claim(s) 1-37 is/are rejected.  |   |   |   |              |  |  |  |
| ·   |   |   |   |   |              |  |  |  |
| _   | Claim(s) are subject to restricti   | on and/or   | election requirement.   |   |              |  |  |  |
| ·   | on Papers   |   |   |   |              |  |  |  |
| _   | -   | Eveniner  |   | •   |              |  |  |  |
| · —   | The specification is objected to by the<br>The drawing(s) filed on is/are:  |   |   | to by the Everniner   |              |  |  |  |
|   | Applicant may not request that any objecti  | -   | , , ,   | •   |              |  |  |  |
|   | Replacement drawing sheet(s) including the  |   |   | * *   | PED 1 101/d) |  |  |  |
|   | The oath or declaration is objected to I  |   |   |   | • •          |  |  |  |
|   | nder 35 U.S.C. § 119  | by the Exc  | annier. Note the attack   | ica Onice Action of John 1  | 10-102.      |  |  |  |
| -   | ,   |   |   | 0.4407-2.75   |              |  |  |  |
| _   | Acknowledgment is made of a claim fo  | or toreign p  | phority under 35 U.S.C  | . § 119(a)-(d) or (t).  |              |  |  |  |
| , –   | ☐ All b)☐ Some * c)☐ None of:   |   | ha a haaa a saasa a   |   |              |  |  |  |
|   | 1. Certified copies of the priority do  |   |   | A 1' 1' A1  |              |  |  |  |
|   | 2. Certified copies of the priority do  |   |   | · ·   | . <b>.</b> . |  |  |  |
|   | 3. Copies of the certified copies of  |   |   | en received in this Nationa   | Stage        |  |  |  |
| * 0   | application from the Internation  |   | • • • •   |   |              |  |  |  |
| 3   | ee the attached detailed Office action  | for a list o  | titie cerunea copies n  | ot received.  |              |  |  |  |
|   |   |   |   |   |              |  |  |  |
| Attachment  | (e)   |   |   |   |              |  |  |  |
| _   | e of References Cited (PTO-892)   | •   | 4\ \ Interder   | v Summary (PTO-413)   |              |  |  |  |
|   | of Draftsperson's Patent Drawing Review (PTC  | D-948)  | Paper N   | o(s)/Mail Date  |              |  |  |  |
| 3) 🛛 Inform   | ation Disclosure Statement(s) (PTO/SB/08)   | ,   |   | f Informal Patent Application   |              |  |  |  |
| Paper   | No(s)/Mail Date <u>4/9/04,6/15/05</u> .   |   | 6) 🔲 Other: _   | <del></del> ·   |              |  |  |  |

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### **DETAILED ACTION**

## Response to Election/Restrictions

Applicant's election with traverse of claims 1-37 in the reply filed on 07/102006 is acknowledged. The traversal is on the ground(s) that the search I not burden. This is not found persuasive because the fields of searching for each Invention are defined in different Classes.

The requirement is still deemed proper and is therefore made FINAL.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1--37 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishida (U.S. Patent number 6,917,639 B2).

Regarding claims 1-37, Ishida discloses a semiconductor laser drive apparatus that modulates a semiconductor laser according to a modulation signal and induces the semiconductor laser to emit light, the apparatus comprising:

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a control unit (50) (Figs. 15, 16 and 23-25) that is adapted to supply a fixed bias current during a light emission off time, and start supplying a predetermined current that is less than a light emission threshold current right before a light emission time; and the control unit comprises: a modulation current source (13) that is adapted to supply a modulation current to the semiconductor laser based on a switching operation realized by a modulation signal, a bias current source (12) that is implemented parallel to the modulation current source and is adapted to supply the bias current having a fixed value, control current source (12) that is implemented parallel to the modulation current source and is adapted to supply a control current that is set by a sample hold circuit based on a switching operation realized by a threshold ON signal (Figs. 3, 6, 7, 14-16, 23-26), determining a differential quantum efficiency (unit 52), a function for setting a difference between the light emission threshold current and the predetermined current that is less than the light emission threshold current, and wherein said difference is set to a value that is greater than or equal to the difference between a light emission current at a time of initialization and a light emission current at a time when an environment temperature is increased from the time of initialization (Figs. 1-44, col. 8, lines 50-67, col. 12, lines 1-67, col. 16, lines 1-67).

### Information Disclosure Statement

3. The references listed on the information disclosure statement submitted on 04/09/2004 and 06/15/2005 have been considered.

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### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T Vu whose telephone number is (571) 272-1832. The examiner can normally be reached on M - F: 9 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2800.

Jimmy Vu

September 26, 2006

TUYET VO PRIMARY EXAMINER